

REMARKS

Reconsideration and allowance of the subject application in view of the following remarks is respectfully requested.

Claims 1-40 are pending.

At the outset, Applicants note that the PTO appears to have improperly withdrawn the present application from Appeal and reopened prosecution. Per the MPEP §1207.04 Reopening of Prosecution After Appeal, approval from the supervisory patent examiner is required for prosecution to be reopened. The present Official Action (OA) mailed June 6, 2008 fails to indicate approval by the supervisory patent examiner of reopening of prosecution in the present case.

Further, a voice mail message left for the Examiner by Applicant's attorney requesting clarification failed to result in any response.

Based on at least the foregoing, Applicant requests clarification and issuance of a new Official Action properly approved by the supervisory patent examiner and/or an Examiner's Answer in response to Applicant's Appeal Brief submission.

Notwithstanding the foregoing, the rejection of claims 1, 9, 17, 25, and 33 under 35 U.S.C. 102(b) as being anticipated by *Yokote* (U.S. Patent Application Publication 2002/0157024) is understood to be withdrawn at least in view of Applicant's Appeal Brief submitted December 26, 2007 and the Patent and Trademark Office (PTO) is requested to confirm same.

Further, the rejection of claims 1, 3-7, 9, 11-15, 17, 19-23, 25, 27-31, 33, and 35-39 under 35 U.S.C. 102(b) as being anticipated by *Thubert et al.* (U.S. Patent Application Publication 2004/0202183) is understood to be withdrawn at least in view of Applicant's Appeal Brief submitted December 26, 2007 and the PTO is requested to confirm same.

Further still, the rejection of claims 1, 2, 8-10, 16-18, 24-26, 32-34, and 40 under 35 U.S.C. 102(b) as being anticipated by *Johansson et al.* (U.S. Patent Application Publication 2002/0080752) is understood to be withdrawn at least in view of Applicant's Appeal Brief submitted December 26, 2007 and the PTO is requested to confirm same.

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Claims 1, 9, 17, 25, and 33 are not anticipated by *Eschbach et al.* (US Patent Application Publication 2003/0088765)

The rejection of claims 1, 9, 17, 25, and 33 under 35 USC 102(e) as being anticipated by *Thubert* is hereby traversed. A rejection based on 35 U.S.C. §102 requires every element of the claim to be included in the reference, either directly or inherently. Claim 1 is patentable over *Eschbach* because the reference fails to disclose or suggest every element of claim 1.

Claim 1

The PTO attempts to rely on paragraph 30 of *Eschbach* for the assertion that the subject matter of claim 1 is anticipated by the reference. This is incorrect.

First and as identified in Applicant's Appeal Brief of December 26, 2007, *Eschbach* appears to describe a process for enabling session inter-device (SID) mobility and not registering a mobile node with a home agent as claimed. SID mobility, as described by *Eschbach* at paragraph 30, enables the transfer of a session from one device to another device. Paragraph 30 fails to disclose establishing a security tunnel between the mobile node and the home agent prior to registering the mobile node with the home agent. Rather, paragraph 29 explicitly states that the home agent "only accepts registration requests from a mobile device 12 which the [home agent] 18 can authenticate as originating from a legitimately relocated mobile device." That is, the mobile device registration occurs prior to establishment of a security tunnel and without using the security tunnel. For at least this reason, and because the PTO has failed to rebut the foregoing statements, withdrawal of the rejection is respectfully requested.

Further, as described by *Eschbach* at paragraphs 31-33, a transferring node registers a target node with the agent prior to establishment of the security association between the agent and the target node. *Eschbach* states that the transfer request (which does not occur over an as-yet-to-be-established security tunnel between the agent and target node) contains "the Target Node's IP address" and security association information to enable subsequent establishment of a security association as

between the Agent and the Target Node. Thus, *Eschbach* fails to disclose the claimed subject matter of claim 1. For at least this reason, withdrawal of the rejection is respectfully requested.

Finally, and in reply to the Response to Arguments section at page 6 of the present OA, Applicant notes that the PTO has failed to respond to any of the arguments set forth and has repeated the reference to paragraph 30 of *Eschbach*. The PTO has failed to identify registration occurring using an established security tunnel as claimed in claim 1. For at least this reason and the reasons set forth above, withdrawal of the rejection is respectfully requested.

Claims 1, 9, 17, 25, and 33 are not anticipated by *Giaretta et al.* (US Patent Application Publication 2007/0230453)

The rejection of claims 1, 9, 17, 25, and 33 under 35 USC 102(b) as being anticipated by *Giaretta* is hereby traversed. A rejection based on 35 U.S.C. §102 requires every element of the claim to be included in the reference, either directly or inherently. Claim 1 is patentable over *Giaretta* because the reference fails to disclose or suggest every element of claim 1.

Claim 1

Giaretta fails to disclose or suggest "registering the mobile node with the home agent **using the security tunnel**" as claimed in claim 1 (emphasis added).

The PTO asserts that *Giaretta* describes registering the mobile node with the home agent using the security tunnel at paragraph 147. This is incorrect. *Giaretta* describes that once the security association has been negotiated, the mobile node sends the binding update message to the home agent to register the care-of address. *Giaretta* at paragraph 147. The PTO-identified portion of *Giaretta*, reproduced herein for ease of reference and convenience, states as follows:

Once the Security Association has been negotiated, the Mobile Node MN sends to the Home Agent HA the Binding Update message 1004 to register its own Care-of Address, thereby activating the Mobile IPv6 service. At this point, after the Home Agent HA sends a corresponding acknowledgment message 1006, the bootstrap procedure is completed and the Mobile Node can start communicating.

Giaretta at paragraph 147

The PTO-identified portion of *Giaretta* fails to identify that the registration occurs using a security tunnel which is contrary to the feature claimed in claim 1. For at least this reason, withdrawal of the rejection is respectfully requested.

Further, *Giaretta* states at paragraph 142 that the security association is established in accordance with "draft-ietf-mobileip-mipv6-ha-ipsec-04", i.e., titled "Using IPsec to Protect Mobile IPv6 Signaling between Mobile Nodes and Home Agents" and referred to herein as the draft IETF Specification. A copy of the draft specification

referred to in *Giaretta* is available from The Internet Society at www.ietf.org and a copy of the draft specification is attached hereto for reference. The draft specification differs from the claimed subject matter in that it appears to only describe the use of a transport layer for registration as opposed to the claimed security tunnel of the present claimed subject matter.

For example, according to section 4.3 of the draft IETF Specification:

The following requirements apply to both home agents and mobile nodes:

- o When securing Binding Updates, Binding Acknowledgements, and prefix discovery, **both the mobile nodes and the home agents SHOULD use the Encapsulating Security Payload (ESP) [4] header in transport mode** and MUST use a non-null payload authentication algorithm to provide data origin authentication, connectionless integrity and optional anti-replay protection.

Draft IETF Specification at section 4.3 (emphasis added).

Thus, the draft IETF Specification states that transport mode and not tunnel mode is to be used.

Further, according to section 5.2.1 of the draft IETF Specification:

5.2.1 Binding Updates and Acknowledgements

Here are the contents of the SPD and SAD for protecting Binding Updates and Acknowledgements:

mobile node SPD OUT:

- IF source = home_address_1 & destination = home_agent_1 &
proto = MH
THEN USE SA1

mobile node SPD IN:

- IF source = home_agent_1 & destination = home_address_1 &
proto = MH
THEN USE SA2

mobile node SAD:

- SA1(OUT, spi_a, home_agent_1, ESP, **TRANSPORT**):
source = home_address_1 & destination = home_agent_1 &
proto = MH

- SA2(IN, spi_b, home_address_1, ESP, **TRANSPORT**):
source = home_agent_1 & d

Draft IETF Specification at section 5.2.1 (emphasis added).

Thus, the draft IETF Specification specifies that the Security Policy Database (SPD) and Security Association Database (SAD) contents specify a transport mode for the Binding Updates.

Finally, the example configuration provided in section 5.3 of the draft IETF Specification states:

5.3 Dynamic Keying

In this section we show an example configuration that uses IKE to negotiate security associations.

5.3.1 Binding Updates and Acknowledgements

Here are the contents of the SPD for protecting Binding Updates and Acknowledgements:

mobile node SPD OUT:

- IF source = home_address_1 & destination = home_agent_1 &
proto = MH

THEN CREATE ESP TRANSPORT SA: local phase 1 identity =
user_1

mobile node SPD IN:

- IF source = home_agent_1 & destination = home_address_1 &
proto = MH

THEN CREATE ESP TRANSPORT SA: local phase 1 identity =
user_1

Draft IETF Specification at section 5.3 (emphasis added).

Thus, the example provided specifies use of the transport mode and not a security tunnel as claimed.

Based on at least the foregoing reasons, claim 1 is patentable over *Yokote* and withdrawal of the rejection is respectfully requested.

Claims 9, 17, 25, and 33 are patentable over *Giaretta* for at least reasons similar to those advanced above with respect to claim 1 and withdrawal of the rejection is respectfully requested.

Claims 3-7, 11-15, 19-23, 27-31, and 35-39 are not rendered obvious under 35 U.S.C. 103(a) by *Eschbach* in view of *Thubert* et al. (US Patent Application Publication 2004/0202183)

The rejection of claims 3-7, 11-15, 19-23, 27-31, and 35-39 under 35 USC 103(a) as being rendered obvious by *Eschbach* in view of *Thubert* is hereby traversed. Claims 3-7 are patentable over the combination of *Eschbach* in view of *Thubert* because the references, singly or in combination, fail to disclose or suggest every element of claim 3-7.

Claims 3-7

First, claims 3-7 depend from claim 1, include further limitations, and are patentable over *Eschbach* in view of *Thubert* for at least the reasons advanced above with respect to claim 1 because *Thubert* fails to cure the above-identified deficiencies of *Eschbach*. For at least this reason, the rejection of claims 3-7 should be withdrawn.

Second, *Thubert* appears to describe establishing a tunnel between a mobile router and a correspondent node and not establishing a security tunnel between a mobile node and a home agent. The Title of *Thubert* is "Arrangement for Establishing a Bidirectional Tunnel Between a Mobile Router and a Correspondent Node." (Emphasis added) There does not appear to be a disclosure of establishing a security tunnel between a mobile node and a home agent as claimed in claims 3-7. Further, paragraph 36, relied on by the PTO, recites communication as between the mobile router and the home agent and route server resource and NOT between the entities and the mobile host. For at least this reason, withdrawal of the rejection is respectfully requested.

Further, the PTO-provided rationale for combining *Eschbach* with *Thubert* states, without reasoned basis or reference to either reference, that "the motivation . . . would have been to specifically teach further aspects of the security tunnel." OA at page 3, final two lines. The PTO has failed to provide a reasoned rationale for the purported motivation to combine the selected portions of *Thubert* with *Eschbach* as asserted. The stated rationale appears to be nothing more than a tautology, asserting that the

references would be combined in order to combine the references. Applicants request clarification regarding the purported motivation.

Based on at least the foregoing reasons, claims 3-7 are patentable over *Eschbach* in view of *Thubert* and withdrawal of the rejection is respectfully requested.

Claims 11-15, 19-23, 27-31, and 35-39 depend, either directly or indirectly, from claims 9, 17, 25, and 33, include further features, and are patentable over *Eschbach* in view of *Thubert* for at least reasons similar to the reasons advanced above with respect to claim 3-7. The rejection of claims 11-15, 19-23, 27-31, and 35-39 should be withdrawn.

Claims 2, 10, 18, 26, and 34 are not rendered obvious under 35 U.S.C. 103(a) by Eschbach in view of Johansson et al. (US Patent Application Publication 2002/0080752)

The rejection of claims 2, 10, 18, 26, and 34 under 35 USC 103(a) as being rendered obvious by *Eschbach* in view of *Johansson* is hereby traversed. Claim 2 is patentable over the combination of *Eschbach* in view of *Johansson* because the references, singly or in combination, fail to disclose or suggest every element of claim 2.

Claim 2

First, claim 2 depends from claim 1, includes further limitations, and is patentable over *Eschbach* in view of *Johansson* for at least the reasons advanced above with respect to claim 1 because *Johansson* fails to cure the above-identified deficiencies of *Eschbach*. For at least this reason, the rejection of claim 2 should be withdrawn.

Second, *Johansson* appears to describe the mobile node as registering with the home agent prior to the tunnel being established and a combination of *Eschbach* with *Johansson* would appear to include the registration prior to tunnel establishment of *Johansson*. *Johansson* at paragraph 114 ("sends a mobile IP 27 registration message to the selected network interface card 88" followed by "instructs the IPsec filter 84a via the security association database 84d to utilize security associations").

Further, *Johansson* appears to describe modification of mobile IP tunnel 30a after receipt of registration request 93, which does not appear to have traversed the tunnel. *Johansson* at paragraph 126 ("The mobile IP tunnel 30a is then modified to contain a UDP header 30c as well."). Paragraph 138 of *Johansson* appears to describe the transmission of "registration request 93 towards the home agent 1" without disclosing that transmission of the registration occurs using the security tunnel. Further still, paragraphs 139-141 of *Johansson* appear to describe the communication of registration information between a mobile node and its home agent without the use of a security tunnel. For at least this reason, withdrawal of the rejection is respectfully requested.

The PTO-identified portion of *Johansson* appears to describe registration occurring prior to establishment of the security tunnel which is contrary to the feature claimed in claim 1. For at least this reason, withdrawal of the rejection is respectfully requested.

Further still, the PTO-provided rationale for combining *Eschbach* with *Johansson* states, without reasoned basis or reference to either reference, that "the motivation . . . would have been to specifically teach further aspects of the security tunnel." OA at page 5, section 6, lines 14-15. The PTO has failed to provide a reasoned rationale for the purported motivation to combine the selected portions of *Johansson* with *Eschbach* as asserted. The stated rationale appears to be nothing more than a tautology, asserting that the references would be combined in order to combine the references. Applicants request clarification regarding the purported motivation.

Based on at least the foregoing reasons, claim 2 is patentable over *Eschbach* in view of *Johansson* and withdrawal of the rejection is respectfully requested.

Claims 10, 18, 26, and 34 depend, either directly or indirectly, from claims 9, 17, 25, and 33, include further features, and are patentable over *Eschbach* in view of *Johansson* for at least reasons similar to the reasons advanced above with respect to claim 2. The rejection of claims 10, 18, 26, and 34 should be withdrawn.

Claims 8, 16, 24, 32, and 40 are not rendered obvious under 35 U.S.C. 103(a) by Eschbach in view of Thubert and further in view of Johansson

The rejection of claims 8, 16, 24, 32, and 40 under 35 USC 103(a) as being rendered obvious by *Eschbach* in view of *Thubert* and further in view of *Johansson* is hereby traversed. Claim 8 is patentable over the combination of *Eschbach* in view of *Thubert* and further in view of *Johansson* because the references, singly or in combination, fail to disclose or suggest every element of claim 8.

Claim 8

First, claim 8 depends from claim 7, and indirectly from claim 1, includes further limitations, and is patentable over *Eschbach* in view of *Thubert* and further in view of *Johansson* for at least the reasons advanced above with respect to claims 1 and 7 because *Thubert* and *Johansson* fail to cure the above-identified deficiencies of *Eschbach* and *Johansson* fails to cure the above-identified deficiencies of *Eschbach* and *Thubert*. For at least this reason, the rejection of claim 8 should be withdrawn.

Claims 16, 24, 32, and 40 depend, either directly or indirectly, from claims 9, 17, 25, and 33 and claims 15, 23, 31, and 39, respectively, include further limitations, and are patentable over *Eschbach* in view of *Thubert* and further in view of *Johansson* for at least the reasons advanced above with respect to the claims from which they depend. For at least these reasons, the rejection of claims 16, 24, 32, and 40 should be withdrawn.

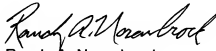
Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 08-2025 and please credit any excess fees to such deposit account.

Respectfully submitted,

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